National Aeronautics and Space Administration
Goddard Space Flight Center

Inside Wallops

Wallops Flight Facility, Wallops Island, Virginia | Volume XIX-99 | Number 26 | July 19, 1999

On July 20, 1969, the human race accomplished its single greatest technological achievement of all time when a human first set foot on another celestial body.

The voyage began at 9:32 a.m. EDT, July 16, when a Saturn V rocket launched Apollo 11 into Earth orbit from Cape Kennedy, FL. After one and a half orbits of the Earth, the third stage of the Saturn V refired to send Apollo on its outward journey to the Moon.

Shortly afterward, the command/ service module, Columbia, separated from the Saturn third stage, turned around and connected nose to nose with the lunar module, Eagle, which had been stored in the third stage. With Eagle attached to its nose, Columbia drew away from the third stage and continued toward the Moon.

On July 19, Apollo 11 neared and went behind the moon. At 1:28 p.m. EDT, it fired its service module rocket to go into lunar orbit. After 24 hours in lunar orbit, Commander Neil A. Armstrong and Alan "Buzz" Aldrin separated Eagle from Columbia to prepare for descent to the lunar surface.

On July 20 at 4:18 p.m. EDT, (with less than 30 seconds of fuel remaining) the Lunar Module touched down on the Moon at Tranquility Base. Armstrong reported "The Eagle Has Landed." And at 10:56 p.m., Armstrong descending from Eagle's ladder and touching one foot to the moon's surface, announced: "That's one small step for a man, one giant leap for mankind."

He was shortly joined by Aldrin, and the two astronauts spent 21 hours on the lunar surface. They returned to Earth with 46 pounds of lunar rocks. After their historic walks on the Moon, they successfully docked with Michael Collins, patiently orbiting the cold but no longer lifeless Moon alone in the Command Module "Columbia." The lunar module, Eagle was then cast adrift in space.

The astronauts fired their service module rocket to break from the Moon's gravitational grip and headed for home. They reached Earth's vicinity at a speed of about 25,000 mph and threaded their way into its atmosphere to avoid burning up or bouncing back into space. Finally with parachutes billowing, they landed in the Pacific Ocean southwest of Hawaii at 12:51 p.m. EDT, July 24.

Wallops Shorts……

Fire Department

Wallops Fire Department Emergency Medical Technicians responded to a mutual aid request for assistance for a medical emergency in New Church on July 11.

Rocket Launch

A Black Brant V NASA sounding rocket was successfully launched on July 14 from the Andoya Rocket Range, Norway. The experiment was to study the mass distribution of dust and aerosol particles in the high latitude summer mesosphere, the electro-dynamic environment, and their relation-ship to the origin of polar mesospheric summer echoes as well as the characteristics of noctilucent clouds.

Dr. Richard Goldberg of the Laboratory for Extraterrestrial Physics, NASA Goddard Space Flight Center was the principal investigator. Several meteorological rockets also were launched to support the science requirements. Frank Schmidlin, Observational Science Branch, NASA Wallops Flight Facility was a Co-investigator.

A NASA Black Brant V sounding rocket ready for launch from the Andoya Rocket Range, Norway.

NASA Honor Awards

The following Wallops employees and groups received NASA Honor Awards at a ceremony held at Goddard Space Flight Center on July 16.

Exceptional Service Medal
William F. Lau, Jr.
Sounding Rockets Program Office

Public Service Medal
David L. Burkhead
Computer Sciences Corporation

Group Achievement Award
NASA Sounding Rocket Team

Public Service Group Achievement Award
Hurricane "Bonnie" Equipment Evacuation Team, Coquina Beach, NC

Shuttle Launch Schedule

The launch of Space Shuttle Columbia, STS-93 is scheduled for July 20 at 12:36 a.m. EDT. There is a 47 minute launch window. The flight will last five days with the shuttle scheduled to land on July 24 at 11:31 p.m.

The STS-93 crew will deploy the Chandra X-ray Observatory, which will allow scientists to more thoroughly study the universe.

The mission will be the first space mission ever commanded by a woman, Air Force Colonel Eileen Collins.

Halem Selected Goddard Assistant Director for Information Sciences

Dr. Milton Halem, has assumed the position of Assistant Director for Information Sciences, at the NASA Goddard Space Flight Center.

Dr. Halem will be responsible for increasing the strategic focus across the Center in the mission critical area of Information Science and Technology. In addition, he will serve as the Chief Information Officer responsible for the underlying networking and information systems infrastructure.

Halem, prior to accepting this new position, was Chief of the Earth and Space Data Computing Division at Goddard. The division manages and operates the NASA Center for Computational Science.

LYME DISEASE

Lyme disease is spread by the bite of ticks that are infected with Borrelia burgdorferi. The deer tick, which normally feeds on the white-footed mouse, the white-tailed deer, other mammals, and birds is responsible for transmitting Lyme disease bacteria to humans in the northeastern and north-central United States.

Ticks search for host animals from the tips of grasses and shrubs and transfer to animals or persons that brush against vegetation. Ticks only crawl; they do not fly or jump. Ticks feed on blood by inserting their mouth parts (not their whole bodies) into the skin of a host animal.

Although in theory Lyme disease could spread through blood transfusions or other contact with infected blood or urine, no such transmission has been documented. There is no evidence that a person can get Lyme disease from the air, food or water, from sexual contact or directly from wild or domestic animals. There is no convincing evidence that Lyme disease can be transmitted by mosquitoes, flies, or fleas.

The risk of exposure to ticks is greatest in the woods and garden fringe areas of properties, but ticks may also be carried by animals into lawns and gardens. Domestic animals may become infected with Lyme disease bacteria and can carry infected ticks into areas where humans live.

For Lyme disease to exist in an area at least three elements must be present in nature: the Lyme disease bacteria, ticks that can transmit them, and mammals to provide food for the ticks.

The early stage of Lyme disease is usually marked by one or more of the following symptoms and signs:

* fatigue
* chills and fever
* headache
* muscle and joint pain
* swollen lymph nodes
* a characteristic skin rash.

The rash is a red circular patch that appears usually 3 days to 1 month after the bite of an infected tick. Common sites are the thigh, groin, trunk and the armpits. The center of the rash may clear as it enlarges, resulting in a bulls-eye appearance. The rash may be warm but usually is not painful. Not all rashes that occur at the site of a tick bite are due to Lyme disease. An allergic reaction to tick saliva often occurs. The resulting rash can be confused with the Lyme disease rash. Allergic reactions to tick saliva usually occur within hours to a few days, usually do not expand and disappear within a few days.

Lyme disease is often difficult to diagnose because its symptoms and signs mimic those of other diseases.

Lyme disease is treated with antibiotics Patients treated in the early stages usually recover rapidly and completely. Most patients who are treated in later stages also respond well to antibiotics. Varying degrees of permanent damage to joints or the nervous system can develop in patients with late chronic Lyme disease. Typically these are patients in whom Lyme disease was unrecognized in the early stages or for whom the initial treatment was unsuccessful.

The Wallops Health Unit has the new Lyme vaccine available for civil service employees. For detailed information contact the Health Unit, x1766.

WEMA/MAA MONTHLY TAILGATE SALE

JULY 21
STARTS @ 11:30

THE FLAG COURT PARKING LOT ACROSS FROM THE CAFETERIA

All contractor, civil servant and tenant employees are invited to participate. All leave and flextime policies apply**.**

30th Anniversary Apollo 11 Moon Landing July 20, 1999

There will be special water rocket launches to take place in area next to the Cafeteria from 11:30 a.m. to 12:30 p.m.

This event will not be a competition. Anyone who wishes to build a water rocket and launch it is welcome !!! Spectators welcome !!! A special poster will be given to those who make their rocket look like a Saturn V.

National Air & Space Museum Family Science Night

Goddard Space Flight Center employees and their families have a chance to experience a very special evening at the National Air and Space Museum, Washington, DC.

The National Air and Space Museum, the Challenger Center for Space Science Education and NASA HEDS, OSS and Education Division invite you to a special Family Science Night from 8 p.m. to 9:45 p.m. on either August 16 or August 17 - and it's FREE!

The program includes 20 minutes to explore the Milestones of Flight and Space Hall galleries. Then it's off to "How Big is Big?", an exciting talk by Dr. Jeff Goldstein, Challenger Center's Director of Space Science Research. Girls and boys (of all ages) should put on their thinking caps because audience participation is required! The evening concludes with a flight through the universe in the IMAX film Cosmic Voyage.

Challenger Center can only offer this program if the minimum requirement of 400 attendees is met. If you are interested in attending Family Science Night, please sign up **by July 23** at the website: **www.challenger.org/fsn/nasahqi**

By July 27, an e-mail will be sent to everyone who registers advising if we have reached the required number to proceed. Family Science Night will be part of the Window on the Universe program to be launched nationally this fall.

Upcoming Training

Management Oversite and Risk Tree-Based Mishap Investigation Refresher Training Course
Where: Wallops Flight Facility
When: Aug. 4 and 5
8 a.m. to 4 p.m.

This course is offered at no cost to NASA civil service and contractor employees. For additional information call Joe Drawdy, x1884.

Inside Wallops is an official publication of Goddard Space Flight Center and is published by the Wallops Office of Public Affairs, Extension 1584, in the interest of Wallops employees.

Editor — Betty Flowers
Photography — Optical Section
Printing — Printing Management Office